

MINUTES

CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC) MEETING

San Diego, August 22, 2002

The third meeting of the CTCDC in 2002 was held in the Caltrans Office in San Diego, on August 22, 2002.

Chairman Jim Larsen opened the meeting at 9:00 a. m. with the introduction of Committee members and guests. The following members, alternates, and guests were in attendance:

| ATTENDANCE | ORGANIZATION | TELEPHONE |
|-------------------|---------------------|------------------|
|-------------------|---------------------|------------------|

Members (Voting)

| | | |
|------------------------------|--|----------------|
| Jim Larsen Chairman | CA State Association of Counties County of Tulare | (559) 733-6291 |
| John Fisher Vice Chairman | League of CA Cities City of Los Angeles | (213) 580-1189 |
| Gerry Meis | Caltrans | (916) 654-4551 |
| Sal Segura | CHP | (916) 657-7222 |
| Ed von Borstel | League of CA Cities City of San Jose | (209) 577-7222 |
| Dwight Ku | California State Automobile Association | (415) 241-8904 |
| Richard Backus | Auto Club of Southern California | (714) 885-2326 |

CTCDC MINUTES

August 22, 2002

Page 2 of 26

| ALTERNATES | ORGANIZATION | TELEPHONE |
|-------------------|---|-------------------|
| Jacob Babico | CA State Association of Counties San Bernardino County | (909) 387-8186 |
| Rich Dilluvio | Auto Club of Southern California | (714) 885-2325 |
| ATTENDEES | ORGANIZATION | TELEPHONE |
| Bill Wald | Caltrans, HQ-ITS | (916) 651-9048 |
| Tom Rooznkirch | TAPCO | (888) 242-6377 |
| Gordon Skotarozyk | TAPCO | (714) 671-1756 |
| Michael Harrison | LightGuard System, INC | (707) 542-4547 |
| Theresa Gabriel | Caltrans HQ-ITS | (916) 654-5039 |
| Eugene Lozano | California Council of the Blind | (916) 278-6988 |
| Sharlene Ornelas | TAAC & SCAT | |
| Paul Gretz | TSCN Santa Clara County Public Health | (408) 885-2204 |
| Ray Mellen | Auto Club So. California (Retired) | |
| Ed Krulikowski | City of El Cajon | (619) 441-1651 |
| Denis Anderson | 3M | (800) 955-7865 |
| Reza Maghissi | County of Sacramento | |
| Gerald Sanders | Center of Blind | (619) 583-1542 |
| Barbara Hebert | Visually Impaired Pedestrian Services (VIPS) | (619) 269-6958 |
| Michel Eder | VIPS | (619) 269-6958 |
| Gary Smith | City of Sacramento | (916) 264-8364 |
| Lynn Mack | Polara Engineering | (888) 340-4872 |
| Victoria Cole | City of San Diego | (619) 533-3093 |
| Ralph R. Leyva | City of Chula Vista | (619) 691-5116 |
| Pat Pearson | Precision Instrument | (949) 234-0436 |
| Chris Carrillo | Econolite Control Products | (714) 630-3700 |
| Johnny Bhullar | Caltrans/Traffic Ops | (916) 654-7312 |
| Helen Elias | Envir. Access Committee | |
| Jim Magerkurth | U.S. Traffic Cop. | (800) 733-7872 |
| David Royer | Universal of California Tech. Transfer | (661) 255-6556 |
| Roger Stephenson | El Segundo Police | (714) 521-0900x31 |
| George Allen | City of Gardan Grove | |
| Karal Shaffer | County of San Diego | (858) 874-4024 |
| Hank Morris | County of San Diego | (858) 874-4013 |
| Mike Robinson | County of San Diego | (858) 874-4121 |

CTCDC MINUTES

August 22, 2002

Page 3 of 26

MINUTES

Adoption of May 8, 2002 CTCDC meeting minutes.

MOTION: Moved by John Fisher, seconded by Gerry Meis, to adopt the minutes of the Sacramento meeting, held on May 8, 2002. Motion carried 7-0.

MEMBERSHIP

Chairman Larsen introduced three new voting members and one alternate member. The voting members introduced were Ed von Borstel who has replaced Wayne Tanda as the Northern League of California Cities representative, Captain Sal Segura who has replaced Ike Iketani as the California Highway Patrol representative and Richard Backus who has replaced Ray Mellen as the Auto Club of Southern California representative. The alternate member introduced was Rich Dilluvio, representing the Auto Club of Southern California.

PUBLIC COMMENTS

Chairman Larsen asked for any public comments related to items that will not be discussed as of an agenda item.

There were no public comments.

AGENDA ITEMS

PUBLIC HEARING

02-7 PUSH BUTTON FOR CROSSWALK WARNING LIGHTS (R62E) SIGN, WATCH FOR TRAFFIC

Chairman Larsen asked Gerry Meis to brief the Committee and audience about this item. Gerry Meis reminded everyone that the in-roadway warning lights (IRWLs) are included in the Millennium MUTCD 2000 under Section 4L. In California, Caltrans is in the process of issuing a policy on these devices. The proposed sign would be used where the lights are activated with a push-button. The purpose of the sign is to remind pedestrians that they must use caution while crossing the roadway. Gerry noted that this is a draft and asked for comments and suggestions.

Chairman Larsen opened the public hearing.

Mike Harrison, LightGuard, noted that his company invented the IRWL at crosswalks and submitted numerous reports to the CTCDC throughout the process. The push-button sign was also used and different messages were tested. The suggested wordings were "Push Button For Crosswalk Warning Lights, Use Caution When Crossing" or "Cross With Caution." Mike suggested following the report prepared by the Whitlock & Weinberger Transportation, Inc. (W-Trans) for the application of the system.

(Continued)

CTCDC MINUTES

August 22, 2002

Page 4 of 26

Gerry Meis noted that the question under discussion was the proposed sign, not the application of the system. Gerry asked if the proposed wording on the sign is acceptable or is there better wording.

Mike reminded everyone that the recommendations outlined in the W-Trans report suggested having a light indicator on the push button to inform the pedestrian that something has been activated with the push-button.

Ralph Leyva, City of Chula Vista, suggested including the California Vehicle Code (CVC) Section on the sign, which covers the pedestrian responsibilities for crossing of public roadways.

Sharleen Ornelas stated that the proposed sign is only for sighted pedestrians, and there is no indication for visually impaired pedestrians (VIPs) about the presence of the crosswalk.

Gene Lozano reinforced Sharleen's comments and added that the Americans with Disabilities Act (ADA), Title 2, require equal access for the VIPs.

Gerry Meis stated that Caltrans follows the "ADA Guidelines" issued by the Federal Highway Administration and presently, there is no mandatory requirement for these devices.

Barbara Hebert stated that the same message could be placed in Braille on the push-button, if an auditory option is not available.

Gerry Meis responded that this would be considered. It would depend on whether it is possible to place that much information on a 7½"x5" plate.

Bill Wald, Caltrans, stated that the VIP might misinterpret the IRWL push-button as a "traffic signal" push-button.

Sharleen responded that the VIP has learned by experience to follow sounds of traffic.

Mike Harrison stated that his company is working with the City of San Francisco to develop a system, which will be helpful for the VIP to find marked crosswalks.

Chairman Larsen asked for other comments from the public. There were none. Chairman Larsen closed the public hearing and opened discussion among Committee members.

Dick Backus noted that this is a warning device and the color of the sign should be yellow.

John Fisher agreed with Dick's comments and suggested replacing the words "Watch for Traffic" with "Cross With Caution". He further added that the VIP cannot see the traffic, but they can hear it. John noted that this is a generic sign and it could have other applications, such as with the flashing beacons.

Chairman Larsen asked for other comments, there were none.

(Continued)

MOTION: Moved by John Fisher, seconded by Gerry Meis, Caltrans consider public comments and the suggestions by the Committee members and bring back this item for the Committee's further review and action. Motion carried 7-0.

Action: Item to be continued.

02-8 FINES HIGHER SIGN (RED LIGHT VIOLATION SIGN)

Chairman Larsen asked Gerry Meis to introduce "Red Light Violation Fine" sign.

Gerry Meis stated that the Traffic Safe Communities Network (TSCN) of Santa Clara County received a grant from the Office of Traffic Safety (OTS) to reduce red light running. Gerry pointed out that the MUTCD Revision 2 has a proposal to include Section 2B.15 "Fines Higher" sign. The proposed language is included in the agenda packet, page 7 of 32. Gerry noted that a similar sign is currently used by many agencies on their roadways in advance of the signalized intersections. Some agencies have even installed "White on Red" signs, which is a violation of the color. The red color is reserved by FHWA to be used on specific messages such as "Stop, Yield, and Do Not Enter" signs etc.. Presently, this sign is not an approved traffic control device in California and agencies are using different colors with different format. Gerry suggested that the Committee should recommend, with their collective judgment, that the proposed sign is an official traffic control device and Caltrans should develop standards and specifications for the sign without going through the experimentation process.

Chairman Larsen opened the public hearing.

Paul Gretz, Program Manager, TSCN, briefed the Committee that they have received a grant from OTS to reduce crashes from running through red lights. Two years ago, "Members of TSCN's Red Light Running Group", conducted an extensive assessment of the traffic collision data (SWITRS) and identified 39 signalized intersections along the El Camino Real and other State highways that are prone to red light running crashes in the County of Santa Clara. The preliminary pilot study indicated a reduction in red light runners ranging from 12% to 60%. Paul added that the sign has been used by local agencies in a variety of colors. He personally prefers the "Black on yellow" color. However, he asked the Committee to recommend a standard sign with an appropriate color to use in problem areas.

Ed Krulikowski, City of El Cajon, stated that there was an article in one of the "Western Magazines" regarding this type of sign and he encouraged the Committee to adopt this sign in the State of California. He added that the \$271 is a maximum fine, not a minimum.

Chairman Larsen asked for other comments from the public. There were none. Chairman Larsen closed the public hearing and opened discussion from Committee members.

(Continued)

CTCDC MINUTES

August 22, 2002

Page 6 of 26

Dick Backus stated that the item is listed under “Fines Higher Sign” and the text proposed in the MUTCD has different conditions such as double or triple fines, not red light violation fines.

Gerry Meis responded that including the MUTCD text in the agenda packet was to inform the Committee that there is a proposal at the national level to allow agencies to install higher fine signs in construction zones, school zones or other applicable designated zones. In addition, the proposed policy allows agencies to place a specific value such as \$150 FINE.

Chairman Larsen asked for other comments, there were none.

MOTION: Moved by Gerry Meis, seconded by John Fisher, that the Committee has determined the “Red Light Violation Fine” sign is an official traffic control device. The Committee further recommended that Caltrans develop standards and specifications for the sign and present this at the next CTCDC Meeting. Motion carried by 7-0.

Action: Item to be continued.

02-9 MANDATORY REQUIREMENT OF ACCESSIBLE PEDESTRIAN SIGNALS (APSS)

Chairman Larsen noted that this item is an outgrowth from the discussion of agenda Item 01-5 “Adoption of the MUTCD 2000 Language on APSs in California.” During those discussions, it was suggested to the Committee that public agencies do not have options when or when not to install APSs. The Committee was told that the APS system must be considered whenever pedestrian provisions are considered at a signalized intersection. During the May 2002 CTCDC meeting, the Committee recommended that Caltrans adopt the MUTCD 2000 language on APSs in California. The Committee further requested a separate agenda item, which will deal with the mandatory requirement of the APSs. The Committee has received correspondence in regards to this item from various visually impaired organizations, the California Council of the Blind (CCB) and from individuals. Chairman Larsen opened the public hearing.

George Allen, City of Garden Grove, stated that when their jurisdiction receives a request for the installation of an audible system, the City requests an opinion and evaluation from the local organization for the blind. Often, the blind organization has recommended against the installation of the APSs. They claim that their training with VIPs provides assistance on how to cross a roadway without additional aid. George stated that it would be a dilemma in their jurisdiction, if APSs become mandated.

Chairman Larsen asked for the name of the organization for the blind.

George responded that the organization is called “Orange County Agency for the Blind” (Impaired Specialist).

(Continued)

CTCDC MINUTES

August 22, 2002

Page 7 of 26

Reja Maghissi, County of Sacramento, stated that he and his associate are in the meeting at the request of Mr. Gene Lozano, to share the County of Sacramento (County) experience with audible devices. The County has implemented a mandatory policy on the installation of APSs at all new signals and during the retrofit of the existing signals. In addition, the County has a process to install the APSs based on a request, received from a group or from a community. The County has 17 intersections equipped with the audible devices. The system used is known as "AP Model 10", which gives the sound of "Cukoo-Cukoo" and "Peep-Peep" except at one intersection the "Polara" system has been installed. The average installation cost of the AP Model 10 unit is approximately \$5000 and maintenance of all 17 locations is approximately \$6000 a year. The reason for the lower maintenance costs is the County's experienced maintenance personnel. The County has not conducted an evaluation on these devices yet. However, the County has received favorable comments from the community and from blind organizations. Initially, the County received complaints about the noise. However, after adjustment of the noise level the community has accepted these devices. Presently, the County receives one to three complaints per month. Reza reminded the Committee that their presence should not be considered as an endorsement for the mandatory requirement of the APSs. Their presence is to share the County's experience on these devices. Reja asked the Committee if he could answer any questions.

John Fisher asked if the County has had experience with the polara system, which provides an audible message, locator tone and vibro-tactile features.

Reza responded that the County has installed the polara system at one intersection. At the beginning, people were confused with the locator tone. The County has installed a sign explaining the purpose of the locator tone. He further added that the polara system was installed a few months ago and, at this point, there is no valid data available to show how the system is working.

Michel Eder, Visually Impaired People Services (VIPS), San Diego, suggested making mandatory requirements for an APS system at all railroad/trolley crossings. He noted that the current practice is based on a request.

Gerry Meis asked Mr. Eder if he was suggesting a mandatory installation for a particular condition rather than mandatory for all new or rehabilitated intersection signals.

Michel responded that is correct.

Sharlene Ornelas, Member of the Removal of Access Barriers, City of San Diego, stated that the Committee she represents advises the City of San Diego on the installation of audible signals. The City of San Diego has adopted a policy, which requires minimum two-block separation between the audible signals. The reason for having separation is the new technology. The audible signals now can be directional. The locator tone will alert the VIPs that there is a push button to activate the APSs system for safe crossing. The audible signals were objectionable at the beginning due to noise pollution. However, the new technology has tremendous success in adjusting the noise level.

(Continued)

CTCDC MINUTES

August 22, 2002

Page 8 of 26

She suggested the Committee follow the recommendations and guidelines submitted by Gene Lozano. The audible signals are needed to make a safe crossing. When an agency provides "Walk" and "Do Not Walk" features for the sighted pedestrian, then, the devices for the VIPs should be provided too. The audible system helps pedestrians overall, not just the VIPs.

Barbara Hebert, VIPS, San Diego, stated that an earlier speaker mentioned that some visually impaired instructors recommend against the APSs system. The training provided to VIPs helps them to listen to the traffic and proceed with their movement. The problem with that is the right turn movement. The audible signals are beneficial for children, senior citizens and disabled pedestrians. The APS devices are cheaper to install with the new signals.

Gene Lozano, CCB, stated that earlier this week he forwarded a draft "Guidelines for Accessible Public Rights-of-Way" (issued on June 17, 2002 by the United States Access Board) for public agencies comments. The draft can be accessed by using the following e-mail address:

<http://www.access-board.gov/rowdraft.htm#Text>

The draft "Guidelines for Accessible Public Rights-of-Way" requires the APS to be installed on new signals, and when upgrading the existing signals. The audible feature allows for a verbal message, or birdcall with vibrotactile and locator tone. It also requires that APSs to be activated by pushing a button, not by holding the push button down for a few seconds. There are options to receive additional information by holding the push button down. These items were included in CCB Resolution 2001B submitted to the Committee. The CCB recommends adopting the guidelines suggested in the Resolution 2001B along with the MUTCD verbiage for APSs in California. During the June 2001 CTCDC meeting, held in San Diego, all participants from the visually impaired community insisted on having consistency and standardization. The CCB does not want prioritization for the APS system. The CCB wants equal access for everyone and it is a civil right. Gene asked the Committee if he could read comments sent by Dr. Billie Louise Bentzen for the record.

Chairman Larsen stated that would be fine to include for the record.

Gene asked Helen Alias, Mobility Instructor, to read Dr. Billie Louise Bentzen's memorandum to the Committee. Helen read the memorandum to the Committee as follows:

ACCESSIBLE DESIGN FOR THE BLIND

Billie Louise Bentzen, Ph.D., COMS

P.O. Box 1212, Berlin, MA 01503

(978) 838-2307 phone/fax

bbentzenaccessforblind.com

August 19, 2002

Memo to: California Traffic Control Devices Committee

From: Billie Louise Bentzen

I commend the California Traffic Control Devices Committee for working proactively toward accessibility of pedestrian signal information to persons who are blind. (Continued)

CTCDC MINUTES

August 22, 2002

Page 9 of 26

The policy recommended by the California Council of the Blind for installation of accessible pedestrian signals (APS) wherever there is new construction or alteration involving pedestrian signals is the same as that now contained in the draft "Guidelines for Accessible Public Rights-of-Way" released by the US Access Board June 17, 2002. I urge you to incorporate this into the California standards for traffic control devices.

APS technology is now readily available that is quiet, providing information to all pedestrians by means of audible locator and walk tones, that there is a pushbutton to actuate the pedestrian phase, the location of the pushbutton, and the status of the WALK interval. According to MUTCD 2000, APS should be responsive to ambient sound, and most of the APS equipment now being marketed in the US has this feature. APS should be audible no more than 6 to 12 feet from the pushbutton or the building line, whichever is less. The information should be audible to persons waiting at the beginning of the crosswalk only, under normal circumstances. Thus, it will be minimally obtrusive in the environment, while being audible by pedestrians waiting at the beginning of the crosswalk.

APS volume can be adjusted so that it is not normally heard from one crosswalk to the parallel crosswalk, much less to a neighboring intersection. This precision of volume adjustment is especially critical at intersections having split phasing.

APSs are not normally intended or needed to provide beaconing information. However, beaconing may be needed at intersections having skewed crosswalks, or at crosswalks that are exceptionally wide. Where beaconing information is needed, it should be provided as an option to users that is available for a single pedestrian phase, actuated by means of a long button press, as provided for in MUTCD 4E.08.

Standardizing the location for an APS is extremely important. The precise location of each APS at the end of the crosswalk it serves is the most direct, intuitive way of providing unambiguous information about which crosswalk has the walk interval. Properly oriented tactile arrows on pushbuttons enable pedestrians to be sure they are pushing the desired button, but the arrows do not help the pedestrian recognize which crosswalk is being signaled by the walk interval tone. Speech messages during the walk interval, that contain the name of the street to be crossed, will be unintelligible to some users in some situations. It is not possible to make speech understandable in all ambient noise conditions, and the majority of pedestrians who are blind who also have some upper frequency hearing loss can be expected to fail to understand or to misunderstand a certain percentage of speech messages.

Pedhead mounted APS that are mounted on the pedhead that is farthest from the crosswalk signaled by the APS are particularly misleading; this is commonly done in installations where two pedheads are mounted on a single pole that is placed away from the curb line. When cuckoo/chirp signals are mounted in this way, users must ignore the closest signal and remember whether it is the cuckoo or chirp that signals their desired crossing direction. The perceptual information conflicts with the symbolic information.

(Continued)

CTCDC MINUTES

August 22, 2002

Page 10 of 26

The best way to provide unambiguous information about which crosswalk has the walk interval is to install two APS at each corner serving two crosswalks, and make the distance between the APS a minimum of 10 feet as provided for in the MUTCD and in the draft "Guidelines for Accessible Public Rights-of-Way."

The same pushbutton should actuate both the audible and vibrotactile walk signal of the APS, and the visual pedestrian signal information. Both should be actuated by a simple press of the button. Optional features, such as a louder (beaconing) signal, a pushbutton message identifying the intersection and the crosswalk controlled by the pushbutton, or a longer pedestrian phase, may be requested by an extended button press, but not the basic audible and vibrotactile walk information.

The above concludes the statement made by Dr. Billie Louise Bentzen.

Helen Alias, Mobility Instructor and Member of the Environmental Committee, stated that if public agencies provide access for pedestrians by using a traffic control device, then, they must provide access for the VIPs. She stressed that all new signals must have APS features, if pedestrian provisions are considered. She added that it is not practical to apply this mandate to existing signals. Retrofit the existing system needs to be prioritized. Railroad crossings need priority.

Gerry Meis commented that Caltrans is testing a new system in the City of Santa Cruz at five locations and facing some challenges, because there are some problem with the new system.

Dwight Ku asked if there would be flexibility at new locations where a study indicates that the APS system is not safe at a particular intersection. Dwight further asked how an agency would reach a consensus on the selection of the device, when a number of options are available for an APS system.

Helen responded that it should be mandatory for new locations, where pedestrian provisions are considered. The mobility instructors for the blind should be consulted about the selection of the appropriate APS system for a particular location.

Gene reminded the Committee of his previous comments and asked for the equal opportunity. Gene added that Norway has installed APSs throughout the country.

John Fisher asked Helen if she would support the concept of developing priority intersections for APS installation, rather than simply mandating installations at new and modified signals.

Helen responded that new locations should be treated equally, however, the existing system could be prioritized based on demand.

Jacob Babico stated there should be a "Warrants System" to justify the installation of APSs, similar to other devices such as, signals, school bus stops, crosswalks etc.. (Continued)

CTCDC MINUTES

August 22, 2002

Page 11 of 26

Bill Wald, Caltrans, supported Jacob's comment.

Mike Harrison added that safety should have priority and it should be considered when installing signals or APS systems.

Sharlene Ornelas responded to the concern raised by various speakers against a mandatory requirement based on safety concerns and high-speed. She stated that if an intersection allows sighted pedestrian crossings, the blind pedestrian should have the same rights. If there is concern about high-speed traffic then the crossing should be prohibited for all pedestrians not just for the blind. If there is an exception clause for these devices, it would be like opening a floodgate. Agencies will find reasons not to install these devices. The other issue is cost and this will go down when a number of vendors start making these devices.

Chairman Larsen asked for other comments from the public. There were none. Chairman Larsen closed the public hearing and opened discussion among Committee members.

Chairman Larsen acknowledged the participation by the visually impaired community on APSs.

Gerry Meis suggested that the draft "Guidelines for Accessible Public Rights-of-Way", which includes a mandatory requirement for APSs was sent out by the FHWA to public agencies for comments. In his opinion, the Committee should table this item and wait for a final ruling on the "Access Report" by the FHWA. Gerry asked Matt Schmitz, FHWA, whether he could provide an update from the FHWA perspective on the mandatory requirement of APSs.

Matt stated that at this time it is too early to make a judgement about the outcome of the "Access Report". He encouraged the Committee to write or pass a resolution asking FHWA to expedite the final decision on the "Access Report". Matt further added that he was not sure about the mandatory requirement of APSs, but public agencies would prefer more direction on the installation of the APSs.

Gerry Meis reiterated that he is sympathetic with the VIPs and they have the same right as others. Gerry added he supports uniformity and consistency on all traffic control devices.

Jim Larsen added that there were two issues raised on the APSs; first, equal access for all and second, ADA requirements. Jim asked Gerry Meis whether he would like to comment on these two issues from the Caltrans perspective.

Gerry read a brief statement on the mandatory requirement of APSs, provided by a Caltrans Attorney:

"The California Department of Transportation (Department) consistently fulfills the requirements of the Americans with Disabilities Act (ADA) and, in so doing, often looks to the federal government for guidance. Thus, the Department defers to the federal Manual on Uniform Traffic Control Devices (MUTCD) regarding accessible pedestrian signals (APSs),

(Continued)

CTCDC MINUTES

August 22, 2002

Page 12 of 26

which provides that such devices may not be needed at many intersections and, therefore, engineering studies should precede their installation. The Department believes that the MUTCD properly considers not only the lack of need for APSs at many intersections, but the very real possibility that installation of APSs at all intersections could render some unsafe. This clearly was not the intent of the legislature in enacting the ADA. Instead, reasonable interpretations of the ADA, like the federal government's regarding APSs found in the MUTCD, are necessary to ensure that public safety is properly protected. For these reasons, the Department cannot agree with the California Council for the Blind's position that APSs should be installed at all intersections."

Gene requested a signed copy of the legal statement. Gene added that Resolution 2001B should be considered and equal access according to ADA guidelines be protected.

Gerry Meis promised to supply a signed copy of the legal statement.

John Fisher added that the issue before this Committee is whether or not there should be a mandatory requirement for APSs. At this point, the MUTCD 2000 and the State Traffic Manual allow these devices based on a need. He suggested that there is a middle ground between the "shall" and "may" conditions and that is "should". If there is a "should" condition, then, public agencies have to justify their reasons not considering the APSs during the installation of new signals or the upgrading of existing ones.

Sharlene suggested that there should be a requirement that all new signals must be equipped with APS features and when FHWA implements the "Access Report", then the devices could be turned on instead of adding all new installations.

Helen stated that John Fisher's proposal is well suited for the existing system, not for the new installations.

Gerry Meis clarified that the Caltrans legal statement is based on current standards outlined in the MUTCD 2000 for the public agencies to follow.

Chairman Larsen asked for other comments, there were none.

MOTION: Moved by John Fisher, seconded by Ed von Borstel, a Subcommittee be formed including members of the CTCDC and representatives from the blind community to develop guidelines to prioritize the installation of "Accessible Pedestrian Signals." These guidelines will be discussed by the CTCDC and upon approval, the Committee will recommend Caltrans include these guidelines in to the Traffic Manual. Motion carried 6-1. Gerry Meis voted against it.

Action: Item will be tabled until the Task Force develops guidelines and brings these back to the Committee for review and recommendations.

02-13 PROPOSED CHANGES TO CHAPTER 9 – TRAFFIC SIGNALS AND LIGHTING OF THE TRAFFIC MANUAL

Chairman Larsen asked John Fisher to introduce proposed editorial changes to “Traffic Signals and Lighting”, Chapter 9 of the Traffic Manual.

John Fisher stated that the Committee members received Chapter 9 of the Traffic Manual and Part IV of the MUTCD to review in the process of adopting the MUTCD with a California Supplement. During the review process, he noticed that there are a number of sections, which need editorial updates or some minor policy changes. The sections requiring updates are included in your agenda packet and the Committee’s action is required to recommend Caltrans make these changes.

Bill Wald, Caltrans, distributed a handout of Chapter 9 of the Traffic Manual to the audience, so they could review the existing language versus the proposed.

John read the current language of the each section and then the proposed language for that section. The current and proposed texts are as follows:

Section 9-04.1 Introduction

The current text reads as follows:

“The California Department of Transportation is responsible for the operation of all State highway traffic signals, regardless of whether the signal is maintained by the State or by others. State highway traffic signals shall include, but are not necessarily limited to, all signals on a State highway and at ramp connections to local streets.”

The proposed text would read as follows:

“Maintenance and operation of highway traffic signals involving State Highways by an agency other than the California Department of Transportation shall require a jointly approved written agreement.”

Section 9-03.15 Right-Turn Arrows

The current third paragraph reads as follows:

“A right-turn green arrow should be used only when the right-turn volume exceeds 200 vehicles per hour, or it is the only movement that traffic is permitted to make.”

The proposed text would read as follows:

“A right-turn green arrow should be considered for use only when there is a right-turn lane or it is the only movement that traffic is permitted to make.”

(Continued)

Section 9-04.6 Red Clearance Intervals

The current text reads as follows:

“Generally, red clearance intervals are not required. A red clearance interval may be used following the yellow change interval, at very wide intersections, offset intersections, or at other locations where it is desirable to delay the green interval for opposing traffic. Normally, red clearance intervals range from 0.1 second to 2.0 seconds.”

The proposed text would read as follows:

“The red clearance interval is an all-red period that may be used to partially or fully clear motorists who are proceeding through the intersection at the end of the yellow change interval. It may also be used to help clear vehicles that are queued within the intersection due to the lack of gaps for permissive left turns or other reasons.”

Section 9-03.12 Location of Signal Faces

The current third sentence reads as follows in bold:

“On an undivided roadway, the signal faces for each through approach of an intersection are usually placed at the far right and far left corners. The signal faces for two or more approaches can often be combined on a single standard. **‘However, where the curb return radius is greater than 3 m, it may be necessary to locate the signal faces on separate standards to provide maximum visibility for the controlled approach.’** Where additional signal faces are required, they may be suspended from a mast arm.”

The proposed third sentence would read as follows:

“However, it is desirable to locate the signal faces on separate standards in order to provide maximum visibility on the controlled approach and minimum visibility on the cross-street approach.”

Same section paragraphs two, first sentence, replace the words “in line with” with “in the center of”.

9-03.35 Temporary Signals for Haul Roads or One-Way Traffic Control in Construction Zones

The current title # 2 under this section reads as “Permit or Contract Requirements” to replace with “Requirements”.

Same Section item # 2D current text reads as follows:

d. “Timing of the signals will be determined by the District Traffic Engineer.”

The proposed text would read as follows:

d. “Timing of the signals will be determined by the public agency having jurisdiction.”

(Continued)

Section 9-03.3 Selection of Left-Turn Phasing

The current second paragraph reads as follows:

“If the left turn volume is 300 vehicles per hour or more, consideration should be given to a two-lane left turn.”

The proposed second paragraph would read as follows:

“If the left turn volume is 300 or more vehicles per hour, or if excessive left-turn delay is documented with one left-turn lane, consideration should be given to a two-lane left turn.”

Section 9-03.4 Simultaneous or Dual Left

Change the current title “Simultaneous or Dual Left” **with** “Dual Left”.

9-03.7 Three Phase Operation

The current first two sentences read as follows:

“This operation is the simplest and the least expensive. It can be either pretimed or traffic-actuated.”

The proposed text would read as follows:

“These phase operations can be either pretimed or traffic-actuated.”

Section 9-03.8 Permissive Left-Turn Phasing

In Paragraph 5, replace the words “Local authorities” **with** “Operating agencies”.

Section 9-03.24 Vehicle Detectors

Delete item #4 “Pressure Sensitive.”

Add item #4 as follows:

4. Video

“Detect vehicles passing through the field of view of a CCTV camera or image sensor. Useful in areas free of extreme lighting changes or severe weather conditions which could obscure visibility.”

Section 9-03.27 Signal Plan Schedules

The Current text under # 2 reads as follows

2. “Conductors and Conduit Schedule.”

The proposed text # 2 would read as follows:

“A conductor and conduit schedule shows the size and number of conductors in each conduit run, unless multi-conductor cable is used.”

(Continued)

Section 9-04.2 Review of Traffic Signal Operations

Change the item # 2 reads as “Time-of-Day Settings” with “Time-of-Day or Traffic Responsive Settings”

Change the last paragraph “ Initial timing of traffic signals and any subsequent changes in timing shall be the responsibility of Traffic Operations. Maintaining the timing is the responsibility of Maintenance. Timing records shall be kept in both Maintenance and Traffic Operations.” **With** “Timing records shall be kept and readily available to maintenance and service.”

Section 9-05.1 Introduction

The Current text under #4 reads as follows:

“Other Warning and Regulatory Signs.”

The proposed text under item # 4 would read as follows:

“An intersections where a more visible warning is desired.”

Section 9-05.2 Signal Ahead Flashing Beacons

The Current text under #3 reads as follows:

3. “Any traffic signal with limited approach visibility and where approach speeds exceed 80 km per hour.”

The proposed text would be splits in #3 and #4 as follows:

3. “Any traffic signals with limited approach visibility”, or
4. “Where approach speed exceed 80Km/h (50mph).”

Chairman Larsen opened the public hearing.

There were no comments on Sections 9-04.1 and 9-03.15.

Matt Schmitz, FHWA, noted that Section 9-04-6 Red Clearance, only talks about vehicle clearance on red. There is another type of red clearance, which is used to allow pedestrian to cross at the signalized intersection. Would it be appropriate to include that type clearance under this section?

John Fisher responded that the appropriate place for pedestrian red clearance would be under the pedestrian phases.

Theresa Gabriel noted that the Caltrans Signal Committee would like to review proposed change to Section 9-04.6 Red Clearance, because it is a policy change not just editorial change. Theresa further added that she was holding all changes to the “signal chapter” due to the MUTCD adoption process. Her understanding was that, first Caltrans adopt the MUTCD, then changes would be handled.

(Continued)

CTCDC MINUTES

August 22, 2002

Page 17 of 26

Bill Wald added that Caltrans would like to review the “red clearance” section.

Johnny Bhullar, Caltrans, explained that if there is a need or amendment is required to update the Traffic Manual, it should be taken care of by using the proper process. There should not be a barrier to correct or make changes to the Traffic Manual due to the adoption of the MUTCD process in California. Johnny added that these changes could be helpful today, why wait for the supplement. Furthermore, these changes will be carried over to the California supplement of the MUTCD.

Jacob Babico supported John Fisher’s suggestion on the red clearance section, and added that “Warrant 1” and “Warrant 2” for the traffic signals justification to be revised by adding footnotes as were in the 1991 Traffic Manual, quote: “Heavier left turn movement from Major Street included when LT-phasing is proposed.”

John Fisher stated that the proposed editorial or minor policy changes would be incorporated in the California Supplement, if the Committee makes recommendations and Caltrans agreed with it. If these changes have not been brought to the Committee’s notice, the California Supplement will reflect with the current text of the Traffic Manual. This is an opportunity to clean-up outdated wording.

There was no comment on Section 9-03.12.

Section 9-03.35 item # 2D, the proposed words “Traffic Engineer” **was replaced with** “public agencies.”

There were no comments on Sections 9-03.3, 9-03.4, 9-03.7 and 9-03.8.

There was comment on Section 9-03.24 Vehicle Detectors. Jim Magerkurth, US Traffic Corp, stated that Pressure Sensitive Detectors are still in the roadway and the text should be kept in the Traffic Manual.

Theresa Gabriel added that they are used at the weigh-in-motion scales.

There were no comments on Sections 9-03.27, 9-04.2, 9-05.1 and 9-05.2.

The **Section 9-04.2** the proposed words “maintenance and service” **were replaced with words** “maintenance and operations staff.”

Chairman Larsen asked for other comments from the public. There were none. Chairman Larsen closed the public hearing and opened discussion among Committee members.

John Fisher suggested having three motions. One, including all the sections and other two for the Sections 9-04.6 Red Clearance and 9-03.24 Vehicle Detectors, respectively.

There were no further comments by Committee members.

(Continued)

MOTION: Moved by John Fisher, seconded by Ed von Borstel, recommended Caltrans make proposed editorial changes to Sections 9-04.1, 9-03.15, 9-03.12, 9-03.35, 9-03.3, 9-03.4, 9-03.7, 9-03.8, 9-03.27, 9-04.2, 9-05.1 and 9-05.2 as listed above with minor changes were agreed during the public hearing. Motion Carried 6-1. Gerry Meis abstained.

The second Motion was presented by John Fisher to adopt the Section 9-04.6 Red Clearance as proposed. The motion was not seconded; therefore, motion did not qualify for voting.

The third Motion by John Fisher, seconded by Ed von Borstel, to adopt the Section 9-03.24 Vehicle Detectors as presented. Motion failed 5-2.

Gerry Meis stated that for the sections which failed the motion, he would like to introduce a motion saying that the Committee recommends Caltrans make these changes, and if Caltrans has concerns with these sections they bring those items back to the Committee with revisions and request Committee approval.

John Fisher agreed with the proposal.

MOTION: Moved by Gerry Meis, seconded by Ed von Borstel, the Committee recommends Caltrans make changes as suggested under the Sections 9-04.6 Red Clearance and 9-03.24 Vehicle Detectors respectively. If Caltrans does not agree with the changes, Caltrans is to bring a revised text for the Committee's review and action. Motion Carried 6-1.

Action: Caltrans will review the proposed suggestions and if there is a disagreement, Caltrans will bring back that particular section, with revisions, for Committee action.

99-18 GROUND MOUNTED LED LIGHTS ON STOP BARS

Chairman Larsen asked John Fisher to apprise the Committee and audience about this agenda item. John stated that the request is to install in-roadway warning lights at a mid-block signalized pedestrian crosswalk. John introduced Sgt. Roger Stephenson, Traffic Division, City of El Segundo and asked him to explain the City's proposed experimentation request.

Roger Stephenson stated that a year ago, a developer in El Segundo asked the City to enhance an existing mid-block controlled cross walk. The crosswalk located in an area of office buildings, entertainment, restaurants, hotel and retail complexes. There has been one vehicle/pedestrian collision in the immediate area. The pedestrian involved in the collision was crossing the roadway outside the marked crosswalk. Roger added that the violations of the stoplight are frequent, as well as pedestrians jaywalking in or out of the crosswalk. The nature of the surrounding area generates large pedestrian traffic and vehicular traffic. The proposed LEDs in the pavement will enhance existing controls, and remind the motorists about the presence of a crosswalk and encourage pedestrians to use the crosswalk. The City will conduct a before and after study, which will include a vehicular count, pedestrian counts and change in the pedestrian and motorists behavior. Presently, two-thirds of pedestrians and one-third of the motorists are responsible for the violations. Roger requested approval of the experimentation. (Continued)

CTCDC MINUTES

August 22, 2002

Page 19 of 26

Gerry Meis asked about the color of the lights.

Roger responded that the color would be consistent with the signal heads, meaning: yellow with yellow phase and red with red phase.

John Fisher inquired as to the purpose of the LEDs at the crosswalk. If the purpose of lights is to encourage pedestrians to use the crosswalk instead of jaywalking, however, the pedestrians would not see unless they push the button, and therefore they would not get their attention.

Roger responded that pedestrians walk or cross in groups, and the City hopes that LED lights will get their attention.

Gerry Meis questioned whether the City has tried other methods to channelize the pedestrians.

Roger responded that different ideas were evaluated, such as fencing along the sidewalk and barrier in the middle of the roadway. The installation of a fence was not feasible due to the numerous driveways in the vicinity. The use of barriers was not acceptable because of aesthetics.

Dick Backus noted that he does not understand what problem the City wants to address. Is the City funneling the pedestrians to use the crosswalk or addressing the collision problems?

Roger responded that presently, 60% of pedestrians do not use the crosswalk and 40% of the drivers are violating the stoplight. The goal of an LED would be to encourage the pedestrians to use the crosswalk and alert motorists about the presence of a crosswalk.

Gerry Meis inquired about the collision history.

Roger responded that in the last 18 months, there were two reported injury-type collisions involving a pedestrian and vehicle.

Chairman Larsen stated that the Committee has authorized a similar application in the City of Anaheim. There were motorists stopping beyond the stop limit line and causing interference with the Disney Tram. The objective of the proposed use is to correct pedestrian behavior.

John Fisher asked whether another method has been used and evaluated to channelize the pedestrians, or, have all the ideas been considered and this is the only feasible one.

Roger responded that pedestrian warning signs were installed to direct pedestrians to use the crosswalk. The idea of an LED is feasible because a developer would finance, help to collect the data, and is cost effective.

Jacob Babico stated that he has seen two different ways to channelize the pedestrians: one, fencing and second, raised barrier within the roadway. (Continued)

CTCDC MINUTES

August 22, 2002

Page 20 of 26

John Fisher inquired, if the Committee approves the experimentation, and later does not recommend applications of LED in this type of installations, would the City be willing to remove the LED lights?

Roger responded that he could include this as a part of the agreement with the developer and make the City and developer aware of the condition.

Mike Harrison, LightGuard, stated that Sgt. Roger and the City of El Segundo want to enhance the effectiveness of the existing signals, which are used for the pedestrian crossing. Based upon the study conducted by the City of Anaheim, over the period of two years the study has concluded significant improvement in red light violations. The red light violations were significantly reduced from a rate of 8.94 violations per 1,000 vehicles to 2.4 violations per 1,000 vehicles.

Theresa Gabriel stated the MUTCD 2000 and draft "Guidelines" developed by the Caltrans do not allow LED-flashing lights at controlled pedestrian crossings. This mid-block crosswalk is controlled by the traffic signals and the use of the LED in the pavement would deviate from standards.

Dwight Ku commented that LEDs in a flashing mode are used at uncontrolled crosswalks. The proposal is to use these at a controlled crosswalk with flashing yellow, red and steady red. This will confuse motorists, especially when they face the flashing yellow mode.

John Fisher noted that the Committee had approved an experiment with a similar application at railroad crossings.

Gerry Meis asked Matt Schmitz, FHWA, if he would like to comment on the proposal.

Matt stated that the use of LEDs at crosswalks is only allowed in a flashing mode and strictly at the uncontrolled crosswalks. The MUTCD 2000 is very clear about the use and states that "they shall not be used where the crosswalk is controlled by traffic signals, stop signs or yield signs.

Chairman Larsen added that the MUTCD 2000 prohibits their use at controlled crosswalks.

John Fisher noted that this Committee is uncomfortable with the proposal and if the City of El Segundo wants to pursue this proposal, they should seek experimental approval from the FHWA.

Gerry Meis agreed with John's comments.

There were no further comments by the Committee members.

MOTION: Moved by John Fisher, seconded by Ed von Borstel, the Committee asked the City of El Segundo to consider Committee comments, concerns, and if the City still wants to pursue the experimental proposal, the City can approach to the FHWA for experimental approval. Motion Carried 7-0.

Action: Item completed.

02-10 PEDESTRIAN COUNTDOWN SIGNAL HEADS (PCSHs)

Chairman Larsen deferred discussion on this item until the next meeting.

01-12 BLINKERSTOP SIGN

Chairman Larsen asked Gerry Meis to apprise the Committee and audience about this agenda item.

Gerry Meis asked Gordon Skotarczyk, representative from TAPCO, to update the Committee on the ongoing experimentation.

Gordon informed the Committee that there are nine locations in the State of California, where BlinkerStop signs have been installed for experimentation. Based on the observations by the experimenting agencies, the signs do increase the conspicuity over the standard stop sign. The collected data have indicated reduction in speed, and increased distance for breaking. Some of the testing agencies have shown an interest in using amber LEDs on the warning signs. Gordon inquired as to whether the agencies could expand the use of amber LEDs on warning signs under the approved experimentation.

Gerry Meis responded that if a public agency wants to use amber LEDs on warning signs, they must get separate approval from the Committee.

Gordon further informed the Committee that a few signs were stolen from the experimental locations. However, since then, the methods of installation have been improved. The LEDs are not causing any conflict with the shape or message of the sign. It appears to be a stop sign. The motorist can see the sign and they can tell it is a stop sign. The flashing area is larger compared to the standard flashing beacon. The cost is less than the flashing beacon, and a sign could be installed in a few minutes. The negative impact was vandalism. The company has improved the installation assembly significantly to eliminate the vandalism. If a sign is stolen within the first 90 days after the installation, it will be replaced at no cost.

Gerry Meis asked when the Committee could expect a final report by the various experimenting agencies.

Gordon responded that some of the agencies have already collected data (Palm Springs) and it was submitted to the Committee, while others have not yet collected any data.

Chairman Larsen shared the experience of their jurisdiction with the BlinkerStop sign. He added that the LEDs were not visible for the eastbound direction at all during the afternoon hours, due to the angle of the sun. They were visible at night and during the dusk & dawn periods.

Gordon responded that the visibility could be improved by using electricity instead of solar power. (Continued)

CTCDC MINUTES

August 22, 2002

Page 22 of 26

Gerry asked if there is any action at the federal level.

Gordon responded that they are waiting for the California study.

Chairman Larsen reminded everyone that this is an update on the ongoing experimentation and no action is planned today.

Tom Rooznkirch, TAPCO, informed the Committee that they have had success at the national level and they are hoping for a final decision within a week or so.

Dick Backus added that he has seen two different installations, one in Palm Springs, where the LEDs were not visible during the daytime, and another installation in Wisconsin, where LEDs were very bright.

Gordon stated that he would work with the agencies to put a final report together for the Committee's review and action.

02-11 SPEED FEEDBACK SIGN

Chairman Larsen asked John Fisher, sponsor of the item to apprise the Committee and audiences.

John noted that the City of Garden Grove has requested to conduct an experiment with the "Speed-Feedback" sign in school zones. John added that the MUTCD Revision 2, which was open for comments from public agencies, has included this type of installation. Although, the agencies have been using these types of signs for years, the sign is not an approved traffic control device. The City of Garden Grove wants to install these signs legally. John invited George Allen, City of Garden Grove, to address the Committee about their proposal.

George Allen stated that the City of Garden Grove wants to participate in experimentation with the radar speed feedback sign at five school crossings. The selected locations have high speed with high traffic volumes. The City has received a grant from the Office of Traffic Safety (OTS) to improve safety in school zones. The speed-feedback sign will give motorists passing through a school zone real time feedback as to their vehicle speed. If the drivers' speed exceeds the posted speed limit by more than 5 mph, LEDs will flash and further alert the driver. The sign will be installed with the "Installation C" school area signs. The "Installation C" is as follows:



Installation C

CTCDC MINUTES

August 22, 2002

Page 23 of 26

The City will collect before and after data, and if the sign proves to be a beneficial tool, the installation could be expanded to residential neighborhoods. George asked the Committee for approval for the experimentation.

Chairman Larsen asked about the color of the sign.

George responded that the sign would be a part of the "Installation C" school area signs and feedback display will be yellow LED on a white background. The sign will be consistent with the MUTCD 2000 standards outlined in "Revision 2."

Chairman Larsen asked if the final MUTCD standards were not as listed in "Revision 2", would the City be following the new standards?

George responded that the City would be consistent with standards published in the MUTCD and make appropriate changes if needed.

John Fisher asked for the type of data the City has planned to collect.

George responded the focus of the data would be to see whether the signs have a positive impact on the motoring public to obey the posted speed limit. The pre data will be collected between August and December 2002. The installation will take place January to March of 2003 and post data will be collected between April and September 2003. The operation of the sign will be with the timing of the school schedules.

Dwight Ku asked if the feedback sign would be used for enforcement.

George responded that the signs would not be used for enforcement.

Sal Segura, CHP, stated for enforcement, the device would need to be approved, certified and checked every 30th month.

There were no further comments by the Committee members.

MOTION: Moved by John Fisher, seconded by Gerry Meis, to authorize experimentation with "Speed-Feedback" signs at five locations as requested by the City of Garden Grove. Motion carried 7-0.

Action: The item approved for experimentation.

Chairman Larsen suggested that although MUTCD 2000 Revision 2 has included text on speed feedback signs, the Committee encouraged the City to make contact with FHWA, they might have an interest in the experimental data.

DISCUSSION ITEMS

02-5 ESTABLISHMENT OF SPEED LIMIT ZONES BASED ON THE ENGINEERING AND TRAFFIC SURVEY

Chairman Larsen asked Jacob Babico to apprise the Committee about his item. Jacob noted that a few years ago, County of San Bernardino established a 40-mph speed zone on a rural road after conducting a Traffic and Engineering Survey. After three years, the California Highway Patrol (CHP) told the County that they have conducted a radar speed survey, which indicated critical speed over 55 mph. Therefore, the 40-mph posted speed limit is illegal. Jacob stated that he cited the CVC Section 627(a) to the Officer, and stated that under this Section "Engineering and Traffic Survey," is required to establish a speed zone in accordance with method determined by the Department of Transportation for the use of State and local authorities. Jacob further stated that CVC Section 627 outlined the criteria, which needs to be included to establish a speed zone. The following is outlined in the CVC 627:

(b) An engineering and traffic survey shall include, among other requirements deemed necessary by the department, consideration of all of the following:

(1) Prevailing speeds as determined by traffic engineering measurements.

(2) Accident records.

(3) Highway, traffic, and roadside conditions not readily apparent to the driver.

(c) When conducting an engineering and traffic survey, local authorities, in addition to the factors set forth in paragraphs (1) to (3), inclusive, of subdivision (b) may consider all of the following:

(1) Residential density, if any of the following conditions exist on the particular portion of highway and the property contiguous thereto, other than a business district:

(A) Upon one side of the highway, within a distance of a quarter of a mile, the contiguous property fronting, thereon, is occupied by 13 or more separate dwelling houses or business structures.

(B) Upon both sides of the highway, collectively, within a distance of a quarter of a mile, the contiguous property fronting, thereon, is occupied by 16 or more separate dwelling houses or business structures.

(C) The portion of highway is longer than one-quarter of a mile but has the ratio of separate dwelling houses or business structures to the length of the highway described in either subparagraph (A) or (B).

(2) Pedestrian and bicyclist safety.

Jacob further added that their jurisdiction is facing similar dilemma again. He asked the Committee to provide guidance on this matter.

Committee member Sal Segura, representing the CHP, expressed that the CHP follow the speed zones established according to the guidelines mentioned in the CVC and in Traffic Manual published by the California Department of Transportation. Sal further added that he is not aware if a CHP officer used different criteria as mentioned by Jacob Babico. He added that he would check with their Headquarters Office and ask them to contact Jacob on this issue. (Continued)

The Committee members supported the idea of having a conversation directly between Jacob and CHP Headquarters to resolve this issue.

Jacob also inquired about the establishment of a speed limit on unpaved roads.

There was no suggestion and the CVC and Traffic Manual are silent in regard to the speed limit on unpaved roads. It was suggested to see whether there are any references available in the federal publications.

02-12 WHEN CHILDREN ARE PRESENT (R72) SIGN

Chairman Larsen asked Gerry Meis to brief the Committee and the audience about this item.

Gerry Meis informed everyone that the enforcement of a 25 mph speed limit with the R72 sign "When Children Are Present" in school zones was questioned by a Judge in Santa Clara County. The Judge said that the California Vehicle Code Section (CVC) 22352 (a)(2) (B) is clear, when to enforce the 25 mph speed limit in school zones. The CVC Section, which reads, " while children are going to or leaving the school either during school hours or during the recess hours." Gerry added that the sign as it is worded "When Children Are Present" is not consistent with the CVC Section 22352 (a)(2) (B), because, it does not identify the applicable time period of the 25 mph speed limit as outlined in the CVC. Gerry invited the Committee members and audience for suggestions to make the sign consistent with the CVC.

There was a lengthy discussion among the Committee members and the audience. There was a suggestion to request a change to the law. Some suggested adding times when a 25-mph speed limit is applicable. Others suggested using more text on the sign would make it difficult to read. However, there was no constructive alternate suggested to replace the "When Children Are Present." Committee Member John Fisher suggested reviewing the current sign language and the Manual on Uniform Traffic Control Devices to see whether the sign could be made more meaningful. It was suggested that Caltrans work to make the sign consistent with the CVC and bring this back to the Committee.

INFORMATION ITEM

99-11 MUTCD ADOPTION BY CALTRANS

The information was deferred until the next meeting. The following is a website address for the MUTCD Supplement:

<http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/>

CTCDC MINUTES

August 22, 2002

Page 26 of 26

EMERGENCY TRAFFIC ALERT SYSTEM

The information deferred on this item until the next meeting. The Committee Secretary will contact the Vendor to find out whether the Vendor is interested in presenting this item to the Committee.

NEXT MEETING

The next meeting will be held on December 5, 2002 in Caltrans District 4 Office, 111 Grand Avenue, Oakland.

ADJOURN:

The meeting was adjourned at 3:45 p.m.